## **SIERRA 10/20/12**

Aircraft: SIERRA - ARC (See full schedule)

Flight Number: 77

Payload Configuration: Galileo HSI

Nav Data Collected: No Total Flight Time: 3.4 hours

Submitted by: Mark Sumich on 10/21/12

Flight Segments:

From:	NQX	То:	NQX			
Start:	10/20/12 11:53 Z	Finish:	10/20/12 15:12 Z			
Flight Time:	3.4 hours					
Log Number:	12R018	PI:	Stanley Herwitz			
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program					
Purpose of Flight:	Science					
Comments:	It was a clear and calm morning and three each seagrass and patch reef polygons were completed. The GCS operator varied several autopilot tuning parameters in an attempt to reduce the pitch variations of the aircraft and improve data quality. Not much difference was noted and the team should upgrade to the latest autopilot software and fully tune the autopilot at the next opportunity. The process is not well described in the company literature, so it will take some investigation. After landing and during taxi back using the 2.4 GHz RC link, the right ruddervator began to operate intermittently and completely failed by the time the aircraft reached the hangar. Operation on the 900 MHz link was normal. Later the ruddervator would work normally and further ground testing could not duplicate the failure. The 2.4 GHz RC link is essential for takeoff and landing and the aircraft could not be flown on a single ruddervator as that would result in excessive pitch/yaw coupling. Consequently, the team is standing down and this deployment is concluded with a total of 12 seagrass and 6 patch reef polygons flown.					

Flight Hour Summary:

	12R018	13R006
Flight Hours Approved in SOFRS	192	
Flight Hours Previously Approved		175.73
Total Used	16.27	0
Total Remaining		175.73

Source URL: https://espo.nasa.gov/oracles/flight\_reports/SIERRA\_10\_20\_12#comment-0

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

NASA Official: Marilyn Vasques

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

12R018 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
11/15/11	62	Check	0.75	0.75	191.25	
11/15/11	63	Check	1.12	1.87	190.13	
08/24/12	66	Check	1.2	3.07	188.93	
10/13/12	72	Check	0.9	3.97	188.03	
10/14/12	73	Science	3	6.97	185.03	
10/17/12	74	Check	0.5	7.47	184.53	
10/17/12	75	Science	4.2	11.67	180.33	
10/18/12	76	Science	1.2	12.87	179.13	

<u>10/20/12</u> 77 Science 3.4 16.27 175.73